



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

m

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,674	03/26/2001	Wolfgang Spahn	051480	3499

9629 7590 11/13/2003

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

KEASEL, ERIC S

ART UNIT	PAPER NUMBER
----------	--------------

3754

DATE MAILED: 11/13/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,674

Applicant(s)

SPAHN ET AL.

Examiner

Eric Keasel

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 August 2003 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "flat armature (38) including flattened areas (58), and there being a defined gap between the flattened areas (58) and the pole core (21) such that tilting with respect to the pole core (21) is avoided during movement of the flat armature (38) and the plunger (36)" (claim 17) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 3754

4. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

New claim 17 recites the “flat armature (38) including flattened areas (58), and there being a defined gap between the flattened areas (58) and the pole core (21) such that tilting with respect to the pole core (21) is avoided during movement of the flat armature (38) and the plunger (36)”. In the application, as filed, the flattened areas (58) are on the plunger (36) and the defined gap is to aid the flow of fluid, not to avoid tilting (see substitute specification, page 6, line 25 to page 7, line 9). This is a new matter rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1, 5-7, and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kowalski et al. (US Patent Number 2,930,404).

Kowalski et al. disclose a solenoid valve with winding (120), pole core (43), housing (11), spring-stressed flat armature (124), a plunger (126, 130, 98) that passes through the pole core, and a valve member connected to the end of the plunger that controls flow between the pressure inlet (60) and the drain outlet (70). There is a compensating channel leading from the

Art Unit: 3754

upper to the lower side of the pole core between the plunger and an axial hole of the pole core so that fluid pressure acts on both the upper and lower faces of the pole core.

7. Claims 1, 2, 6, 11, 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanamori et al. (US Patent Number 5,476,079).

Kanamori et al. disclose a solenoid valve with winding (44), pole core (40), housing (31), spring-stressed flat armature (43), a plunger (41) that passes through the pole core, and a valve member connected to the end of the plunger that controls flow between the pressure inlet (32a) and the drain outlet (31a, see column 7, lines 8-14). There is a compensating channel (40a) leading from the upper to the lower side of the pole core so that fluid pressure acts on both the upper and lower faces of the pole core (see Fig. 1).

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Rembold et al. (US Patent Number 5,476,079).

Rembold et al. disclose a solenoid valve with winding (3), pole core (4), pole disk (7), housing (1), spring-stressed flat armature (11), a plunger (17) that passes through the pole core, and a valve member (28) connected to the end of the plunger that controls flow between the pressure inlet (23) and the drain outlet (25). Fluid pressure from the outlet drain acts on both the upper and lower faces of the pole core (see Fig. 1).

Response to Arguments

9. Applicant's arguments filed 22 Aug 2003 have been fully considered but they are not persuasive.

It should be noted that the anticipatory rejections are under 35 USC 102(b), not 103(b). The supposed differences between the disclosures of applicant and Kowalski or Kanamori are not relevant to the rejections of the claims. Applicant presents only one argument regarding an existing limitation in the claims of record. That is, the prior art of record does not disclose that the pressure equalization to both sides of the pole core is supplied via T pressure (see claim 2). It should be noted that only Kanamori is used to reject claim 2 because Kowalski does not disclose this; but Kanamori clearly discloses that the pressure equalization to both sides of the pole core is supplied via a connection to tank.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hascher-Reichl et al. disclose a similar solenoid valve.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 3754

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

Eric Keasel 6/NOV/03

Eric Keasel
Examiner
Art Unit 3754